

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

REC'D 07 JUN 2007

WIPO

PCT

Applicant's or agent's file reference 5532.P023PCT	FOR FURTHER ACTION		See Form PCT/IPEA/416
International application No. PCT/US04/08243	International filing date (day/month/year) 17 March 2004 (17.03.2004)	Priority date (day/month/year) 17 March 2003 (17.03.2003)	
International Patent Classification (IPC) or national classification and IPC IPC: H04B 7/00; H04H 1/00, 7/00 USPC: 455/3.01.3.03, 3.04, 3.06, 41.2, 412.1, 414.1			
Applicant SIMPLE DEVICES, INC.			
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35, and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 8 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> (sent to the applicant and to the International Bureau) a total of ___ sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p> <p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the report</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>			
Date of submission of the demand 13 October 2004 (13.10.2004)		Date of completion of this report 23 May 2007 (23.05.2007)	
Name and mailing address of the IPEA/ US Mail Stop PCT, Attn: IPEA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450		Authorized officer Raymond S. Dean	
Facsimile No. (571) 273-3201		Telephone No. 571-272-7877	

Form PCT/IPEA/409 (cover sheet)(April 2005)

293

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/US04/08243

Box No. I Basis of the report

1. With regard to the language, this report is based on:

- ☒ the international application in the language in which it was filed.
- ☐ a translation of the international application into English, which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
- ☐ publication of the international application (under Rule 12.4(a))
- ☐ international preliminary examination (under Rules 55.2(a) and/or 55.3(a))

2. With regard to the elements of the international application, this report is based on (replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):

- ☒ the international application as originally filed/furnished
- ☒ the description:
pages 1-19 as originally filed/furnished
pages* NONE received by this Authority on _____
pages* NONE received by this Authority on _____
- ☒ the claims:
pages 20-24 as originally filed/furnished
pages* NONE as amended (together with any statement) under Article 19
pages* NONE received by this Authority on _____
pages* NONE received by this Authority on _____
- ☒ the drawings:
pages 1/13-12/13 as originally filed/furnished
pages* NONE received by this Authority on _____
pages* NONE received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.

3. ☒ The amendments have resulted in the cancellation of:

- ☒ the description, pages NONE
- ☒ the claims, Nos. NONE
- ☒ the drawings, sheets/figs NONE
- ☒ the sequence listing (specify): NONE
- ☒ any table(s) related to the sequence listing (specify): NONE

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (specify): _____
- ☐ any table(s) related to the sequence listing (specify): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

Form PCT/IB/EA/409 (Box No. I) (April 2005)

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/US04/08243**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. Statement**

Novelty (N)	Claims <u>NONE</u>	YES
	Claims <u>1-2, 4-6, 8-12, 15-16, 18-19, 21-24, 29</u>	NO
Inventive Step (IS)	Claims <u>NONE</u>	YES
	Claims <u>1-30</u>	NO
Industrial Applicability (IA)	Claims <u>1-30</u>	YES
	Claims <u>NONE</u>	NO

2. Citations and Explanations (Rule 70.7)
Please See Continuation Sheet

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

V. 2. Citations and Explanations:

1. Claims 1 - 2, 4 - 6, 8 - 12, 15 - 16, 18 - 19, 21 - 24, and 29 lack novelty under PCT Article 33(2) as being anticipated by Walsh et al. (US 2003/0050058).

Regarding Claim 1, Walsh teaches a system comprising: a server computer (Figure 1, Section 0049 lines 6 - 11); a wireless transmitter to transmit a signal (Figure 1, Section 0043 lines 10 - 11); and a portable device comprising: a wireless receiver to receive the signal (Figure 1, Section 0043 lines 1 - 9, the Bluetooth enabled devices comprise transceivers thus there will be a receiver to receive signals from the DCDS server); and a wireless transceiver to transition from a first state to a second state to perform content synchronization with the server computer in response to the signal (Section 0042 lines 1 - 5, during standby mode the Bluetooth enabled devices will listen for inquiry messages, when the access code in said inquiry messages matches the access code derived from the Bluetooth enabled devices identify said devices will transition to an activation mode and synchronize with the master (DCDS server) to form a piconet), wherein the wireless transceiver consumes less power in the first state than in the second state (Section 0042 lines 1 - 5, the Bluetooth enabled devices in a Bluetooth system will transition from the standby mode to the activation mode, the standby mode consumes less power than the activation mode).

Regarding Claim 2, Walsh teaches all of the claimed limitations recited in Claim 1. Walsh further teaches wherein the wireless transmitter is physically coupled to the server computer (Figure 1, Section 0043 lines 10 - 11).

Regarding Claim 4, Walsh teaches all of the claimed limitations recited in Claim 1. Walsh further teaches wherein the wireless transmitter transmits the signal periodically until the portable device responds to the signal (Section 0042 lines 1 - 5, the master (DCDS server) periodically transmits inquiry messages which comprise access codes, when the access code matches the Bluetooth enabled devices access code said Bluetooth enabled devices will respond with an acknowledgement signal).

Regarding Claim 5, Walsh teaches all of the claimed limitations recited in Claim 1. Walsh further teaches wherein the wireless transmitter transmits the signal in response to a user request (Sections 0082 lines 1 - 7, 0083).

Supplemental Box

Regarding Claim 6, Walsh teaches all of the claimed limitations recited in Claim 1. Walsh further teaches wherein the wireless receiver includes a radio frequency (RF) receiver (Figure 1, Section 0043 lines 1 - 9, the Bluetooth enabled devices comprise RF transceivers thus there will be a RF receiver to receive signals from the DCDS server) and the wireless transmitter includes a RF transmitter (Figure 1, Section 0043 lines 10 - 11, the Bluetooth transceivers comprise RF transmitters).

Regarding Claim 8, Walsh teaches all of the claimed limitations recited in Claim 1. Walsh further teaches wherein the wireless receiver includes a mobile cellular phone network receiver (Section 0043 lines 1 - 9).

Regarding Claim 9, Walsh teaches all of the claimed limitations recited in Claim 1. Walsh further teaches wherein the wireless transmitter includes a wireless local area (WLAN) transceiver (Section 0042 lines 6 - 7).

Regarding Claim 10, Walsh teaches all of the claimed limitations recited in Claim 1. Walsh further teaches wherein the server computer includes a personal computer (Figure 1).

Regarding Claim 11, Walsh teaches a method comprising: causing a first microprocessor in a portable device to transition from a first state to a second state in response to a wireless signal (Sections 0042 lines 1 - 5, 0043 lines 1 - 9, the Bluetooth enabled devices comprise microprocessors, during standby mode the Bluetooth enabled devices will listen for inquiry messages, when the access code in said inquiry messages matches the access code derived from the Bluetooth enabled devices identity said devices will transition to an activation mode and synchronize with the master (DCDS server) to form a piconet, since the microprocessor controls said Bluetooth enabled devices said microprocessor will transition from the standby mode to the activation mode) wherein the first microprocessor consumes more power in the second state than in the first state (Section 0042 lines 1 - 5, the Bluetooth enabled devices in a Bluetooth system will transition from the standby mode to the activation mode, the standby mode consumes less power than the activation mode, since the microprocessor controls the Bluetooth enabled device said microprocessor consumes less power in standby mode than in activation mode); the first microprocessor activating a wireless transceiver in the portable device to establish communication with a server computer in response to the wireless signal (Section 0042 lines 1 - 5, the master (DCDS server) periodically transmits inquiry messages which comprise access codes, when the access code matches the Bluetooth enabled devices access code said Bluetooth enabled devices will respond with an acknowledgement signal); and synchronizing content stored in the portable device with content in the server computer (Section 0042 lines 1 - 5, during standby mode the Bluetooth enabled devices will listen for inquiry messages, when the access code in said inquiry messages matches the access code derived from the Bluetooth enabled devices identity said devices will transition to an activation mode and synchronize with the master (DCDS server) to form a piconet).

Regarding Claim 12, Walsh teaches all of the claimed limitations recited in Claim 11. Walsh further teaches enabling a power supply system to cause the first microprocessor to transition from the first state to the second state (Section 0042 lines 1 - 5, during standby mode the Bluetooth enabled devices will listen for inquiry messages, when the access code in said inquiry messages matches the access code derived from the Bluetooth enabled devices identity said devices will transition to an activation mode and synchronize with the master (DCDS server) to form a piconet).

Regarding Claim 15, Walsh teaches all of the claimed limitations recited in Claim 11. Walsh further teaches wherein the wireless signal includes a radio frequency (RF) pulse (Section 0042 lines 1 - 5, the master (DCDS server) periodically transmits inquiry messages which comprise access codes, said inquiry messages are transmitted in pulses).

Regarding Claim 16, Walsh teaches all of the claimed limitations recited in Claim 11. Walsh further teaches wherein the wireless signal includes a pager message (Section 0042 lines 1 - 5, in a Bluetooth system units desiring a connection transmit paging and inquiry messages).

Regarding Claim 18, Walsh teaches a method comprising: activating a transmitter; and wirelessly transmitting a signal using the transmitter (Figure 1, Section 0043 lines 10 - 11, the Bluetooth transceivers will transmit signals), wherein the signal causes a wireless transceiver in a portable device to transition from a first state to a second state to perform content synchronization with a server computer if the portable device receives the signal (Section 0042 lines 1 - 5, during standby mode the Bluetooth enabled devices will listen for inquiry messages, when the access code in said inquiry messages matches the access code derived from the Bluetooth enabled devices identity said devices will transition to an activation mode and synchronize with the master (DCDS server) to form a piconet), wherein the wireless transceiver consumes less power in the first state than in the second state (Section 0042 lines 1 - 5, the Bluetooth enabled devices in a Bluetooth system will transition from the standby mode to the activation mode, the standby mode consumes less power than the activation mode).

Regarding Claim 19, Walsh teaches all of the claimed limitations recited in Claim 18. Walsh further teaches providing a graphical user interface to allow a user to specify a predetermined time at which the signal is transmitted (Section 0083, the user wants the content to be broadcast at the time said user selects said content, said time is the predetermined time).

Regarding Claim 21, Walsh teaches all of the claimed limitations recited in Claim 18. Walsh further teaches receiving a user request, in response to which the transmitter is activated (Section 0082 lines 1 - 7).

Regarding Claim 22, Walsh teaches an apparatus comprising: a wireless receiver to receive a signal (Figure 1, Section 0043 lines 1 - 9, the Bluetooth enabled devices comprise transceivers thus there will be a receiver to receive signals from the DCDS server); and a wireless transceiver operable to transition from a first state to a second state to perform content synchronization with a server computer in response to the signal (Section 0042 lines 1 - 5, during standby mode the Bluetooth enabled devices will listen for inquiry messages, when the access code in said inquiry messages matches the access code derived from the Bluetooth enabled devices identity said devices will transition to an activation mode and

Supplemental Box

synchronize with the master (DCDS server) to form a piconet), wherein the wireless transceiver consumes less power in the first state than in the second state (Section 0042 lines 1 - 5, the Bluetooth enabled devices in a Bluetooth system will transition from the standby mode to the activation mode, the standby mode consumes less power than the activation mode).

Regarding Claim 23, Walsh teaches all of the claimed limitations recited in Claim 22. Walsh further teaches a microprocessor, coupled to the wireless receiver, to periodically enable the receiver (Section 0043 lines 1 - 9, the Bluetooth enabled devices comprise microprocessors).

Regarding Claim 24, Walsh teaches all of the claimed limitations recited in Claim 23. Walsh further teaches wherein the microprocessor cycles between a first and a second power mode (Section 0042 lines 1 - 5, during standby mode the Bluetooth enabled devices will listen for inquiry messages, when the access code in said inquiry messages matches the access code derived from the Bluetooth enabled devices' identity said devices will transition to an activation mode and synchronize with the master (DCDS server) to form a piconet, since the microprocessor controls said Bluetooth enabled devices said microprocessor will cycle between the standby mode and activation mode), the microprocessor consumes less power in the first power mode than in the second power mode (Section 0042 lines 1 - 5, the Bluetooth enabled devices in a Bluetooth system will transition from the standby mode to the activation mode, the standby mode consumes less power than the activation mode, since the microprocessors control the Bluetooth enabled devices said microprocessors will consume less power in the standby mode than in the activation mode), and the microprocessor enables the receiver when the microprocessor is in the second power mode (Section 0042 lines 1 - 5, during standby mode the Bluetooth enabled devices will listen for inquiry messages, when the access code in said inquiry messages matches the access code derived from the Bluetooth enabled devices' identity said devices will transition to an activation mode and synchronize with the master (DCDS server) to form a piconet).

Regarding Claim 25, Walsh teaches a machine-readable medium that provides instructions that, if executed by a processor, will cause the processor to perform operations comprising: providing a user interface to allow a user to enter a predetermined time (Sections 0013 lines 1 - 9, 0083, the Bluetooth enabled devices comprise microprocessors thus there will be a machine-readable medium for the instruction code that runs said microprocessors, the user wants the content to be broadcast at the time said user selects said content, said time is the predetermined time); and wirelessly transmitting a signal at the predetermined time to cause a wireless transceiver in a portable device to transition from a first state to a second state to perform content synchronization with a server computer if the portable device receives the signal (Section 0042 lines 1 - 5, during standby mode the Bluetooth enabled devices will listen for inquiry messages, when the access code in said inquiry messages matches the access code derived from the Bluetooth enabled devices' identity said devices will transition to an activation mode and synchronize with the master (DCDS server) to form a piconet), wherein the wireless transceiver consumes less power in the first state than in the second state (Section 0042 lines 1 - 5, the Bluetooth enabled devices in a Bluetooth system will transition from the standby mode to the activation mode, the standby mode consumes less power than the activation mode).

2. Claims 3 and 27 - 28 lack an inventive step under PCT Article 33(3) as being obvious over Walsh et al. (US 2003/0050058) in view of Sun et al. (US 2002/0137460).

Regarding Claim 3, Walsh teaches all of the claimed limitations recited in Claim 1. Walsh further teaches wherein the portable device is inside an automobile (Section 0043 lines 1 - 9, the Bluetooth enabled devices can be inside automobiles).

Walsh does not teach a remote controller that includes the wireless transmitter and the remote controller is physically coupled to a key to the automobile.

Sun teaches a remote controller that includes the wireless transmitter and the remote controller is physically coupled to a key to the automobile (Sections 0014, 0016 lines 1 - 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Walsh with the remote controller of Sun for the purpose of enabling a user to remotely control said user's Bluetooth enabled device as taught by Sun.

Regarding Claim 27, Walsh teaches all of the claimed limitations recited in Claim 23. Walsh does not teach a remote controller to send the signal in response to user activation.

Sun teaches a remote controller to send the signal in response to user activation (Sections 0014, 0016 lines 1 - 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Walsh with the remote controller of Sun for the purpose of enabling a user to remotely control said user's Bluetooth enabled device as taught by Sun.

Regarding Claim 28, Walsh in view of Sun teaches all of the claimed limitations recited in Claim 27. Walsh further teaches wherein the portable device is inside an automobile (Section 0043 lines 1 - 9, the Bluetooth enabled devices can be inside automobiles). Sun further teaches wherein the remote controller includes a key to the automobile (Section 0014).

3. Claim 7 lacks an inventive step under PCT Article 33(3) as being obvious over Walsh et al. (US 2003/0050058) in view of Striemer (US 2003/0197607).

Regarding Claim 7, Walsh teaches all of the claimed limitations recited in Claim 1. Walsh does not teach wherein the wireless receiver includes a pager network receiver.

Striemer teaches a pager network receiver (Sections 0074).

Supplemental Box

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Bluetooth enabled devices of Walsh with the pager module of Strierner for the purpose of creating a more flexible Bluetooth device that can receive pages over a paging network as taught by Strierner.

4. Claims 13 - 14 and 25 - 26 lack an inventive step under PCT Article 33(3) as being obvious over Walsh et al. (US 2003/0050058) in view of Hunt (US 6,263,491).

Regarding Claim 13, Walsh teaches all of the claimed limitations recited in Claim 12. Walsh further teaches cycling a microprocessor in the portable device between a first and a second power modes (Section 0042 lines 1 - 5, during standby mode the Bluetooth enabled devices will listen for inquiry messages, when the access code in said inquiry messages matches the access code derived from the Bluetooth enabled devices' identify said devices will transition to an activation mode and synchronize with the master (DCDS server) to form a piconet, since the microprocessor controls said Bluetooth enabled devices said microprocessor will cycle between the standby mode and activation mode), wherein the microprocessor is operable in the second power mode to enable the power supply system in response to the wireless signal (Section 0042 lines 1 - 5, during standby mode the Bluetooth enabled devices will listen for inquiry messages, when the access code in said inquiry messages matches the access code derived from the Bluetooth enabled devices' identify said devices will transition to an activation mode and synchronize with the master (DCDS server) to form a piconet), and wherein the microprocessor consumes less power in the first power mode than in the second power mode (Section 0042 lines 1 - 5, the Bluetooth enabled devices in a Bluetooth system will transition from the standby mode to the activation mode, the standby mode consumes less power than the activation mode, since the microprocessors control the Bluetooth enabled devices said microprocessors will consume less power in the standby mode than in the activation mode).

Walsh does not teach second microprocessor.

Hunt teaches a second microprocessor (Column 6 lines 22 - 39).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Bluetooth enabled devices of Walsh with the dual microprocessor of Hunt as an alternative means for controlling said Bluetooth enabled devices.

Regarding Claim 14, Walsh in view of Hunt teaches all of the claimed limitations recited in Claim 13. Walsh further teaches receiving the wireless signal by a receiver coupled to a microprocessor (Section 0043 lines 1 - 9, since the microprocessor controls the Bluetooth enabled devices, the Bluetooth transceivers of said devices are coupled to the microprocessor). Hunt further teaches a second microprocessor (Column 6 lines 22 - 39).

Regarding Claim 25, Walsh teaches all of the claimed limitations recited in Claim 23. Walsh further teaches a microprocessor to enable the wireless transceiver in response to the signal (Section 0043 lines 1 - 9, the Bluetooth enabled devices comprise microprocessors), and a power supply system, coupled to said microprocessor, to provide power to said microprocessor (Section 0043 lines 1 - 9, a Bluetooth enabled device comprises a power supply that provides power to the components, such as the microprocessor, that make up said device).

Walsh does not teach second microprocessor.

Hunt teaches a second microprocessor (Column 6 lines 22 - 39).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Bluetooth enabled devices of Walsh with the dual microprocessor of Hunt as an alternative means for controlling said Bluetooth enabled devices.

Regarding Claim 26, Walsh in view of Hunt teaches all of the claimed limitations recited in Claim 13. Walsh further teaches the power supply system providing power to the microprocessor in response to the signal (Section 0042 lines 1 - 5, the master (DCDS server) periodically transmits inquiry messages which comprise access codes, when the access code matches the Bluetooth enabled devices access code said Bluetooth enabled devices will respond with an acknowledgement signal, power will be provided in the activation mode).

5. Claims 17, 20, and 30 lack an inventive step under PCT Article 33(3) as being obvious over Walsh et al. (US 2003/0050058) in view of Linnartz (US 2002/0066018).

Regarding Claim 17, Walsh teaches all of the claimed limitations recited in Claim 11. Walsh does not teach decoding an encrypted message carried by the wireless signal.

Linnartz teaches decoding an encrypted message carried by the wireless signal (Section 0028 lines 1 - 9).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the encryption method taught by Linnartz in the Bluetooth system of Walsh for the purpose of authenticating the Bluetooth enabled devices in order to enable user privacy as taught by Linnartz.

Regarding Claims 20, 30, Walsh teaches all of the claimed limitations recited in Claims 18, 29. Walsh does not teach encrypting a message, wherein wirelessly transmitting the signal includes transmitting the encoded/encrypted message.

Linnartz teaches encrypting a message, wherein wirelessly transmitting the signal includes transmitting the encoded/encrypted message (Section 0028 lines 1 - 9).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the encryption method taught by Linnartz in the Bluetooth system of Walsh for the purpose of authenticating the Bluetooth enabled devices in order to enable user privacy as taught by Linnartz.

6. Claims 1-30 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/US04/08243

Supplemental Box

matter claimed can be made or used in industry.

----- NEW CITATIONS -----
NONE